

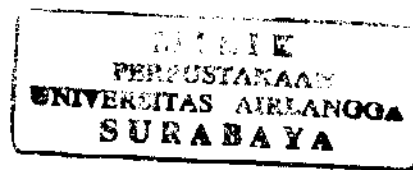
NICOTINE
CHROMATOGRAPHY, GAS

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ARVANITA NURHAYATI

PENETAPAN KADAR NIKOTIN DALAM ASAP ROKOK PADA PRODUK ROKOK KRETEK DENGAN KROMATOGRAFI GAS



**FAKULTAS FARMASI UNIVERSITAS AIRLANGGA
BAGIAN ILMU BAHAN ALAM
SURABAYA
2003**

Lembar Pengesahan



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**Dibuat Untuk Memenuhi Syarat
Mencapai Gelar Sarjana Farmasi Pada
Fakultas Farmasi Universitas Airlangga**

2003

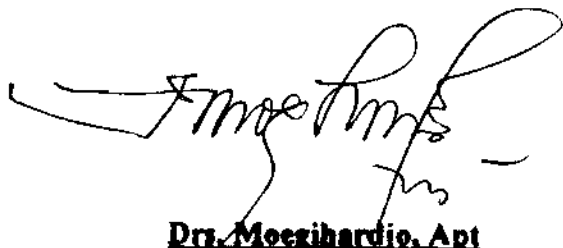
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ABSTRACT

Determination of nicotine in cigarettes smoke condensates by Gas Chromatography has been done. The cigarette samples were stored for 48 hours at room temperature (22 ± 1)°C and relative humidity of (60 ± 2) %. The smoking of cigarettes and collection of mainstream smoke was carried out using an automatic smoking machine fitted with a glass fibre filter smoke trap. The smoke condensates were then dissolved of the mainstream smoke in an organic solvent (propan-2-ol containing 0,5 g per litre of quinaldine as the internal standard). GC-FID is used for the determination of the nicotine content of an aliquot of the solution. A qualitative parameter, represented by retention time (R_t). Based on the retention time data of the samples and standards, the nicotine of the sample was detected. Quantitative data resulted that nicotine content in cigarette smoke condensates in some cigarette brand were $2,8 \text{ mg} \pm 5,8\%$; $5,9 \text{ mg} \pm 1,2\%$; $9,2 \text{ mg} \pm 3,8\%$; $11,9 \text{ mg} \pm 1,2 \%$ for brand A, B, C, D respectively.

Keywords : Gas chromatography, nicotine, smoke condensates, retention time, internal standard